

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

Date of mailing (day/month/year) 18 January 2001 (18.01.01)	
International application No. PCT/US00/15791	Applicant's or agent's file reference 54919PCT1A
International filing date (day/month/year) 08 June 2000 (08.06.00)	Priority date (day/month/year) 09 June 1999 (09.06.99)
Applicant TOYOOKA, Kazuhiko	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:16 November 2000 (16.11.00)☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Maria Kirchner Telephone No.: (41-22) 338.83.38
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# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>54919PCT1A</b>	<b>FOR FURTHER ACTION</b>		see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/US 00/ 15791</b>	International filing date (day/month/year) <b>08/06/2000</b>	(Earliest) Priority Date (day/month/year) <b>09/06/1999</b>	
Applicant <b>3M INNOVATIVE PROPERTIES COMPANY</b>			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☒ because this figure better characterizes the invention.

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☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 00/ 15791

## Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

An optical laminated body comprising :  
a polarizing layer (21)  
a first transparent film (22) disposed closely to a front surface of the polarizing layer (21) and  
a second transparent film (23) disposed closely to a back surface of the polarizing layer (21), the polarizing layer (21) comprises a reflective polarizing film, and both of the first transparent film (22) and the second transparent film (23) are diffusive films.

# INTERNATIONAL SEARCH REPORT

National Application No

PCT/US 00/15791

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 F21V8/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F21V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 787 942 A (NITTO DENKO) 6 August 1997 (1997-08-06) page 10 -page 13; figures 13,14 -----	1
A	EP 0 545 705 A (SHARP) 9 June 1993 (1993-06-09) column 10, line 44 - line 51; figure 6 -----	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

23 August 2000

Date of mailing of the international search report

30/08/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
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Authorized officer

Malic, K

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/15791

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0787942	A	06-08-1997	JP	9102209 A		15-04-1997
			US	5727107 A		10-03-1998
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EP 0545705	A	09-06-1993	JP	3015174 B		06-03-2000
			JP	5158033 A		25-06-1993
			JP	3007735 B		07-02-2000
			JP	5158034 A		25-06-1993
			KR	9708351 B		23-05-1997
			US	5341231 A		23-08-1994
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# PATENT COOPERATION TREATY

## PCT

REC'D 23 OCT 2001

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>E 2852 PCT</b>		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) <b>FOR FURTHER ACTION</b>	
International application No. <b>PCT/US00/15791</b>	International filing date (day/month/year) <b>08/06/2000</b>	Priority date (day/month/year) <b>09/06/1999</b>	
International Patent Classification (IPC) or national classification and IPC <b>F21V8/00</b>			
Applicant <b>3M INNOVATIVE PROPERTIES COMPANY</b>			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of one sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  <b>16/11/2000</b>	Date of completion of this report  <b>19.10.2001</b>
Name and mailing address of the international preliminary examining authority:   <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>	Authorized officer  <b>Denk, H</b>  Telephone No. <b>+49 89 2399 2899</b>



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/15791

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

### Description, pages:

1-21 as originally filed

### Claims, No.:

1-3 as received on 25/06/2001 with letter of 22/06/2001

### Drawings, sheets:

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/15791

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	1-3
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-3
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-3
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**



**R Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. The published document EP-A2-0 787 942 is to be considered as describing the closest prior art, describing a light guide device, in particular consisting of
  - an (upper and lower) polarizing layer (71, 73)
  - a diffusion plate (74). See in that respect figures 13 and 14.
2. The object of the present invention is an improvement of the above mentioned device.
3. To solve the above-mentioned objects, the invention relates to the use of one polarizing as well as a first and a second diffusive films. The features of the amended claims were disclosed in the application as filed.
4. The subject-matter of the present invention is considered new, since the documents on file do not show the above features.
5. The subject-matter of the present invention is considered as involving an inventive step, since the documents on file do not hint the features of the independent claim 1.
6. The subject-matter of the present invention is considered as industrially applicable since it can be used in the lighting industry.
7. The dependent claims 2 and 3 relate to particular embodiments of the invention.

**Re Item VII**

**Certain defects in the international application**

1. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/15791

- 1.1 The opinion of the applicant, expressed in the 3rd paragraph of item 2 of his answer to the Written Opinion, is understood as availing himself of the provisions contained in Rule 6.2(b) PCT, third phrase.
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document EP-A2-0 787 942 is not mentioned in the description, nor is this document identified therein.
3. The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.
- 3.1 The term "lighting equipment" (claim 2) has been changed to "lighting device". However, the description is using this term (see e. g. the description of fig. 3 on page 10).

**CLAIMS**

1. An optical laminated body comprising:  
5 polarizing layer,  
a first transparent film disposed closely to a front surface of the polarizing layer,  
and  
a second transparent film disposed closely to a back surface of the polarizing layer,  
characterized in that the polarizing layer comprises a reflective polarizing film, and both of  
10 the first transparent film and the second transparent film are diffusive films.
2. A lighting equipment that illuminates an illuminating body, characterized in that  
the lighting equipment comprises:  
(A) the optical laminated body of claim 1, and  
15 (B) a surface light source supplying light to the optical laminated body, through  
a light-entrancing-surface (an opposite surface to a surface contacting closely to the  
polarizing layer) of the first transparent film of the optical laminated body,  
the light illuminating the illuminating body is diffused-polarized light emitted from  
a light emitting surface (an opposite surface to a surface contacting closely to the  
20 polarizing layer) of the second transparent film of the laminated body.
3. An area luminescence equipment comprising the lighting equipment of claim 2,  
and a transparent illuminating body illuminated thereby from back surface of the  
illuminating body,  
25 characterized in that there is no diffusive plate disposed between the lighting  
equipment and the illuminating body.

*Replaced by  
Article 34*